

Robust Energy Storage for Intelligence Logistics In Extreme, Novel and Challenging Environments (RESILIENCE)

Dr. Dawson Cagle | Program Manager | August 5, 2020 | Proposers' Day



Office of the Director of National Intelligence

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Welcome to the RESILIENCE Proposers' Day!

- Thank you for your interest in IARPA's intent to run a new program on power solutions: RESILIENCE.
- This is an information meeting. A draft of the technical section of the BAA IARPA-BAA-20-02 has been posted at beta.sam.gov.
- Please send us questions and comments at any time during today's meeting through the WebEx software tool.
- To assure a clear broadcast stream, audio and video are disabled for meeting participants.
- A recording of Proposers' Day will be posted on the RESILIENCE website: <https://www.iarpa.gov/index.php/research-programs/resilience>



Disclaimers

- This presentation is provided solely for information and planning purposes.
- The Proposers' Day does not constitute a formal solicitation for proposals or proposal abstracts.
- Nothing said at Proposers' Day changes the requirements set forth in a BAA.
- The BAA language supersedes anything presented or said by IARPA at the Proposers' Day.



Goals

- Familiarize participants with IARPA's interest in the RESILIENCE program.
- Foster discussion of complementary capabilities among potential program participants, AKA teaming.
 - An attendance list will be provided to all attendees; please reach out to your fellow participants.
 - Take a chance, someone might have a missing piece of your puzzle.

*Please ask questions and provide feedback.
This is your chance to alter the course of events.*



Questions & Answers

- There will be a 30-minute break after today's presentations.
- Responses to submitted questions will be broadcast at 3:00 pm EDT, so please don't log out or close your WebEx connection.
- Responses will be posted on the RESILIENCE website.
- Feedback on the draft BAA may be submitted to the program email at dni-iarpa-baa-20-02@iarpa.gov until August 21, 2020.
- Today is your last opportunity to ask questions before the BAA is posted.
- When the final BAA is posted on the beta.SAM.gov website, questions may be submitted on the site and answers will be posted there.

| Time | Topic | Speaker |
|--------------------|--|---|
| 12:00 PM – 1:00 PM | Webex Open for Meeting Registration | (Host) |
| 1:00 PM – 1:10 PM | Welcome, Logistics, Proposers' Day Goals | Dr. Dawson Cagle Program Manager, IARPA |
| 1:10 PM – 1:20 PM | IARPA Overview | Dr. Catherine Cotell Deputy Director for Research, IARPA |
| 1:20 PM – 2:10 PM | RESILIENCE Program Overview | Dr. Dawson Cagle |
| 2:10 PM – 2:30 PM | Doing Business with IARPA | Mr. Jack Hahne Contracts Officer, IARPA |
| 2:30 PM – 3:00 PM | Break | |
| 3:00 PM – 4:00 PM | Responses to Questions | Dr. Dawson Cagle |

Note: All times are EDT (Washington, DC Time)

IARPA Overview

**Dr. Catherine Cotell, Deputy Director for Research
Intelligence Advanced Research Projects Activity**



Office of the Director of National Intelligence

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Office of the Director of National Intelligence





IARPA Mission

IARPA envisions and leads *high-risk, high-payoff research* that delivers innovative technology for future *overwhelming intelligence advantage*.

- Our problems are **complex** and **multidisciplinary**
- We emphasize **technical excellence** and **technical truth**



IARPA Method

Bring the best minds to bear on our problems

- Full and open competition to the greatest possible extent
- World-class, rotational Program Managers

Define and execute research programs that:

- Have goals that are clear, measurable, ambitious and credible
- Employ independent and rigorous Test & Evaluation
- Involve IC partners from start to finish
- Run from three to five years
- Publish peer-reviewed results and data, to the greatest possible extent
- Transition new capabilities to Intelligence Community partners



IARPA Snapshot

IARPA's research portfolio is diverse, including math, physics, chemistry, biology, neuroscience, linguistics, political science, cognitive psychology and more.

- **70% of completed research transitions** to U.S. Government partners
- **3,000+ journal articles** published
- IARPA funded researchers have been awarded the **Nobel Prize in Physics** for quantum computing research, a **MacArthur Fellowship**, a **Bell Prize**.
- IARPA is a member of the National Science and Technology Council (NSTC) and actively engages with the White House BRAIN Initiative, National Strategic Computing Initiative, and the NSTC Select Committee on Artificial Intelligence, the NSTC Subcommittee on Quantum Information Science (SCQIS), and NSTC Subcommittee on Economic and Security Implications of Quantum Science (ESIX).

How to Engage with IARPA

Getting Started with IARPA

At IARPA, we take real risks, solve hard problems, and invest in high-risk/high-payoff research that has the potential to provide our nation with an overwhelming intelligence advantage.

Are you interested in partnering with us to advance the state-of-the-art in research and development?

[Read More](#)

iarpa.gov | 301-243-1995

info@iarpa.gov

Reach out to our Program Managers.

Schedule a visit if you are in the DC area or invite us to visit you

Opportunities to Engage:

RFIS AND WORKSHOPS

Opportunities to learn what is coming, and to influence programs.

“SEEDLINGS”

Typically a 9-12 month study; you can submit your research proposal at any time. We strongly encourage informal discussion with a PM before proposal submission.

PRIZE CHALLENGES

No proposals required. Submit solutions to our problems – if your solutions are the best, you receive a cash prize and bragging rights.

RESEARCH PROGRAMS

Multi-year research funding opportunities on specific topics.



Agenda



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Robust Energy Storage for Intelligence Logistics In Extreme, Novel and Challenging Environments (RESILIENCE)

Dr. Dawson Cagle | Program Manager | August 5, 2020 | Proposers' Day



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Outline

- Program Overview
- Motivation
- Programmatic Structure
- Metrics and Test and Evaluation
- Schedule
- Scope

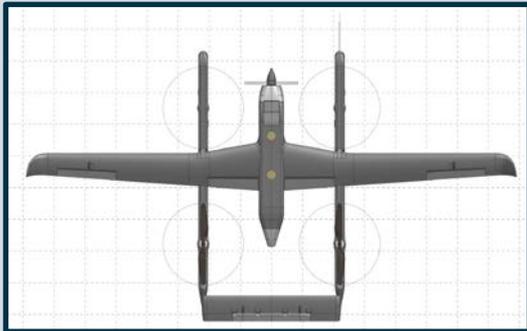


Power Solutions are Critical to Many Intelligence Community (IC) Missions

Planned Research Tracks

Track 1

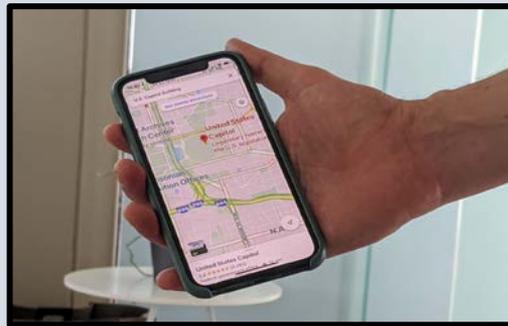
High Power Density and High Energy Density



VTOL-UAVs need long flying times/
high power at takeoff/hover/landing

Track 2

Long calendar life, Super-high Reliability, Power Pulses On-Demand, Small Size



Electronics Must Function On Demand, with No Notice



Functionality Needed Under Wide Temperature Ranges

Three research phases are planned over 45 months.



RESILIENCE aims to increase energy density by 2x and calendar life by 10x

Current Capability

High Energy Storage Track 1

380 Wh/kg cells
Pulse power is a challenge
Minimal maintenance allowed

Robust Storage Track 2

286 Wh/kg cells
5%/month self-discharge at 25°C.
Cell degrades at high temps before deployment

Customer Needs

100%
Increase
in Flight
Times

10x self-
discharge
reduction

75% more
energy

RESILIENCE Goals

High Energy Storage

750 Wh/kg, 5kg-2.5L
Pulse power 1 minute
Zero Maintenance
Prototype is ready

Long Calendar Life Storage

500 Wh/kg, 30mL / 50g
Pulse Power 5 seconds
<0.5% Self Discharge/month
at 25°C. 10 useful cycles
Resilient at 0-60°C temperatures
Prototype is ready



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LHO

IARPA Little Horned Owl Program Needs RESILIENCE Power

Program Goals

- Quiet flight
- Innovative battery architecture to improve flight times for battery-only flight
- Lower take off gross weight
- Ten-pound payload
- Runway independent operation (minimal ground support equipment)
- Flexible/reconfigurable platform for mission tailoring
- Reduced system logistic footprint

Program Goal: Two hours of quiet flight, 5 kg power source



IARPA Little Horned Owl Program Needs RESILIENCE Power

LHO

Examples of IARPA-funded Quiet UAVs



Photo courtesy of Boeing



Photo courtesy of Northrop Grumman

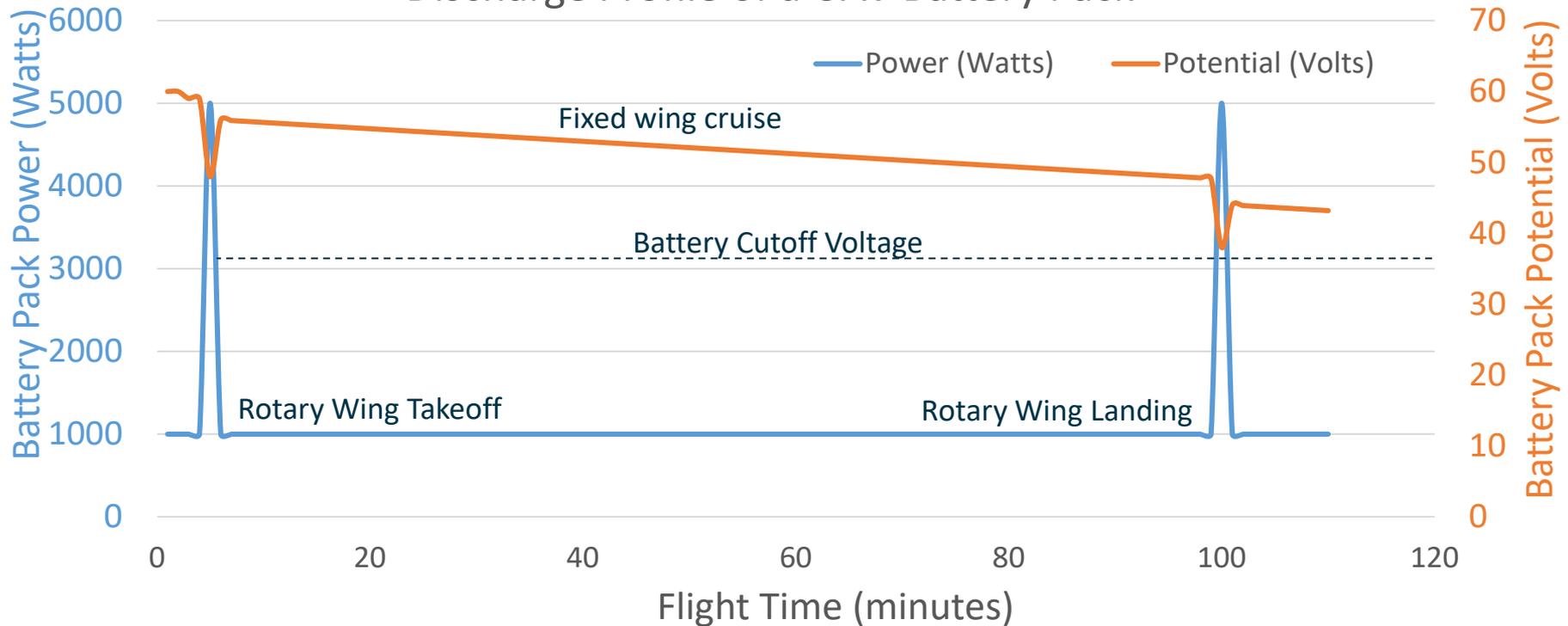


Track 1 Example



Power sources with high energy density and power pulses are needed to extend flight times and prevent brownouts

Discharge Profile of a UAV Battery Pack*



**Flight time is diminished by power pulses
If the battery cutoff voltage is crossed, brownouts can occur**

*Chart is based upon actual flight data.

Track 2 Example:

Electronics in Remote Areas Need RESILIENCE Power

Remote Emplacements Call for Performance in Extreme
Conditions with High Reliability

GPS station on Kīlauea Volcano



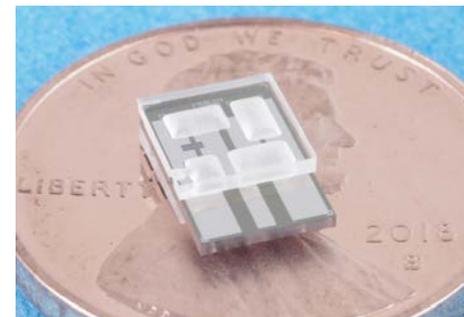
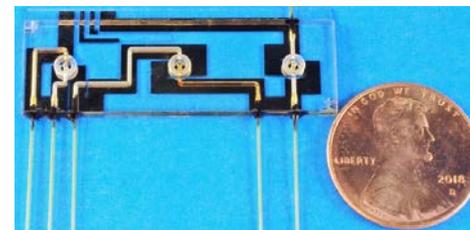
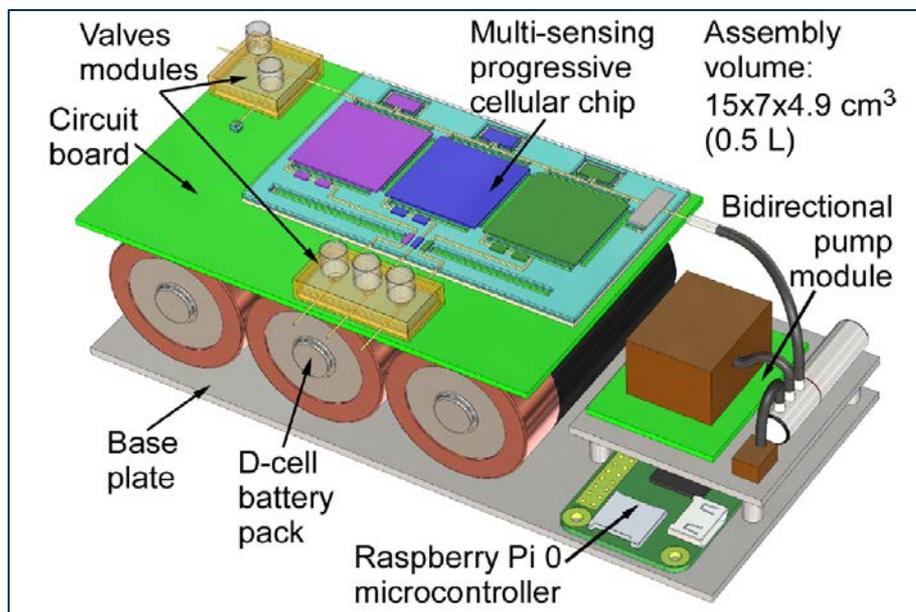
Credit: Louis Sass, USGS. Public domain

Field Data Collection at Gulkana Glacier



Credit: Darrin Miller, Idaho Water Science Center.
Public domain

Portable, Low-Power Gas Chromatography Sensors in MAEGLIN Program need RESILIENCE Power



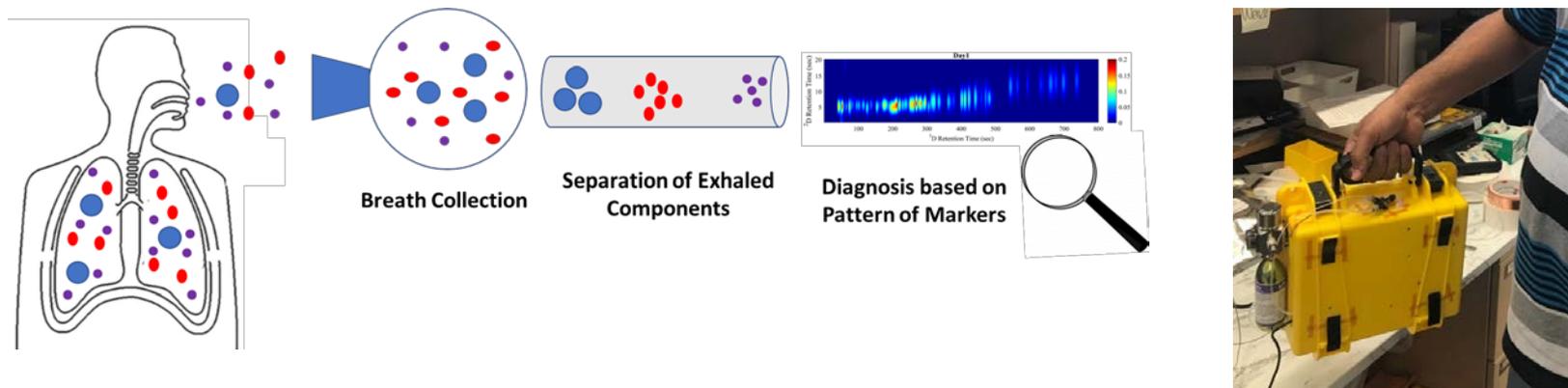
Photos Courtesy of University of Michigan, Gianchandani Lab

Energy consumption is approximately 1.35 Wh / analysis
Power bursts of up to 150 W are needed for 1 second
Program goal is six months of unattended operation.

Track 2 Example:

MAEGLIN Sensors May Also Be Used to Keep People Safe from COVID-19

The University of Michigan project is beginning clinical trials for early detection of markers associated with Acute Respiratory Stress Syndrome



Reliable, portable power is needed to keep us safe in population-dense activities



Credit: Pixabay. Public domain



Credit: Wendy Wei. Public domain



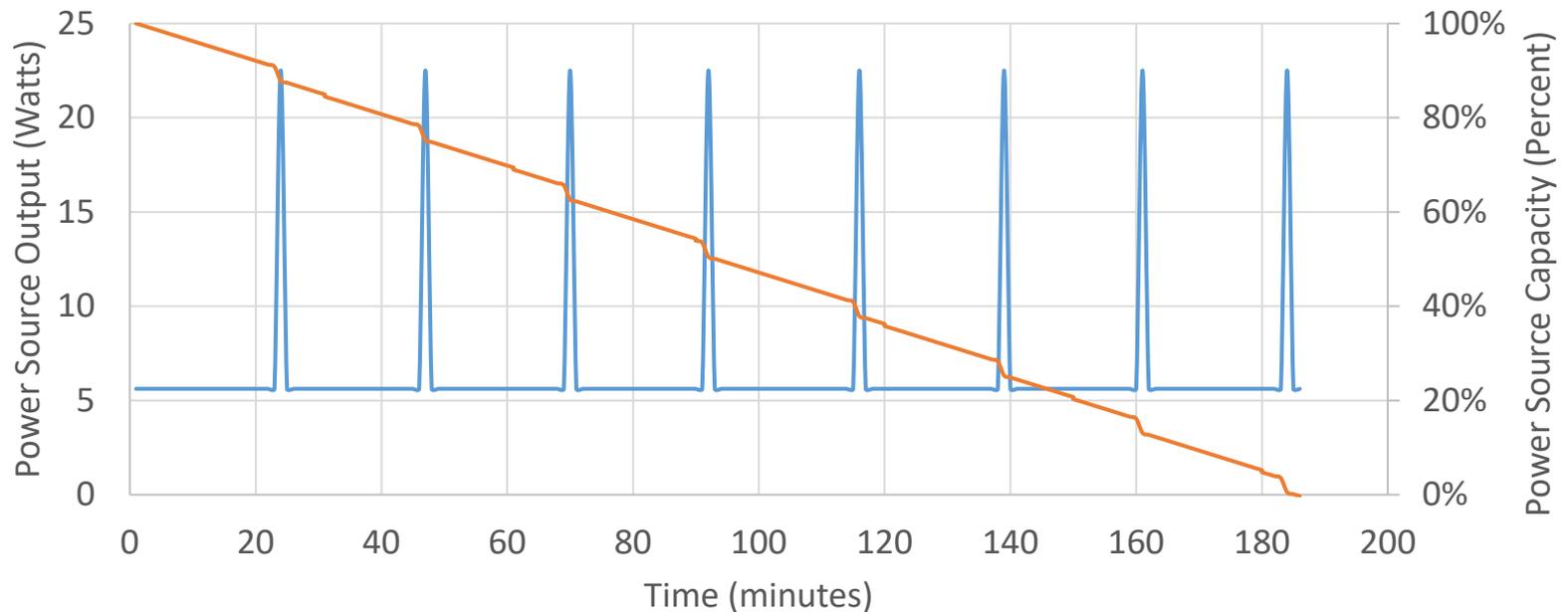
Credit: Skitterphoto. Public domain



Track 2 Example:

High energy density batteries can lose capacity and suffer damage when pulsed

Discharge Pulsed Energy Profile of a High Energy Battery*



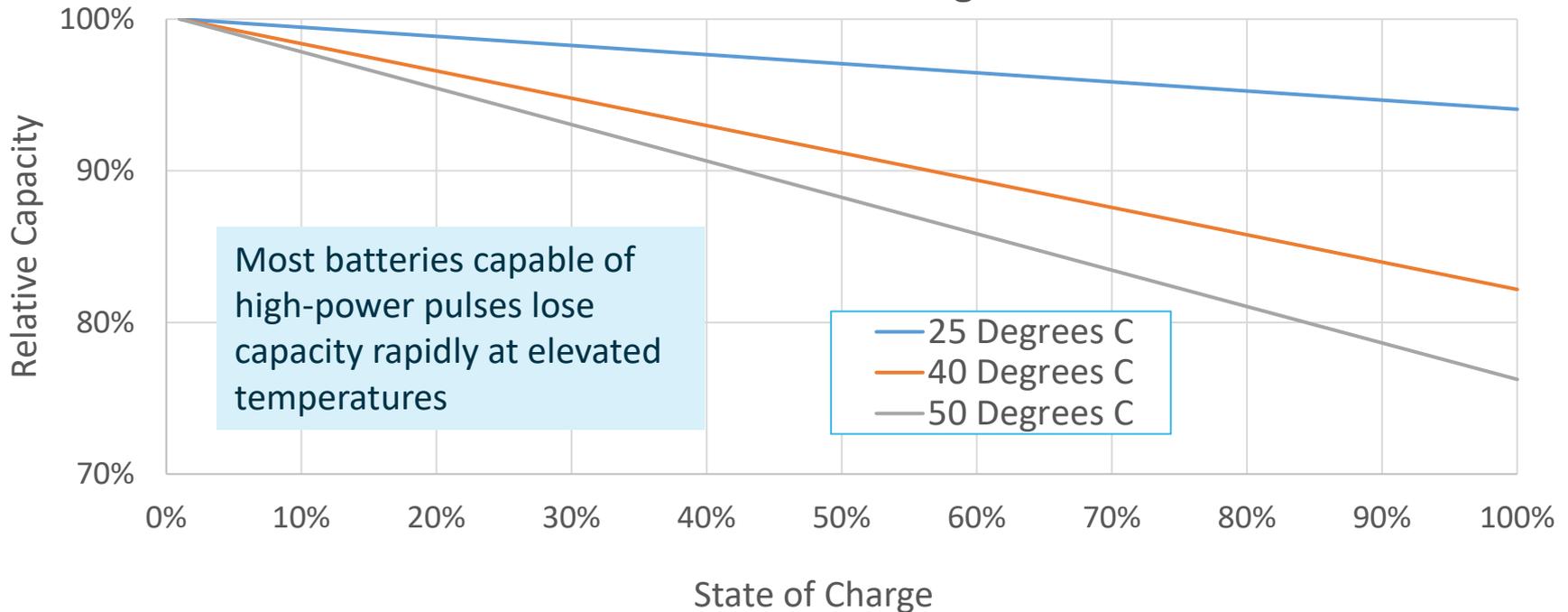
Power pulses in today's batteries can diminish capacity dramatically
Each pulse can cause permanent damage to the battery



Track 2 Example:

High environmental temperatures significantly reduce battery capacity

Li-NMC Battery Capacity Loss After 10 Months
Versus State of Charge





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Program Structure: Three Phases (45 Months)



Phase 1 (15 months) Proof of Concept

- Self-Contained
- Testable
- Design documents and modeling demonstrate how Phase I-3 calculated metrics will be achieved



Phase 2 (18 months) Packaged Power Solution

- All equipment needed for operation is included in mass and volume used for energy and power density calculations



Phase 3 (12 months) Prototype

- Meets final program metrics
- Final materials component assembly and risk mitigation is in place



Selected Power Source Descriptions

■ Self-contained:

- No external equipment, addition of electricity or fuels, or other external inputs
- Examples include coin cell batteries, or a breadboard-mounted fuel cells

■ Packaged power source:

- Self-contained; *and*
- Mass and volume of any equipment needed for operation (e.g., compression, insulation, or gas conditioning equipment) is included in the calculation of energy density and power density.

■ Prototype:

- Packaged power source; *and*
- Meets final program metrics, with additional materials development, improved component assembly, and mitigation of risks of failure over time. Units should perform under testing under the T&E testing protocols without dangerous incident.



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Test and Evaluation

- Performers will submit their power solutions for test events throughout the program.
 - One test event near end of Phase 1 and 3, two in Phase 2
 - 5 Test Articles per test within the test event
- Achieving program metrics is one factor considered in deciding which teams move forward to later phases of the program
- Proposals should be written with T&E in mind.
 - Testing protocols as written are notional and will be finalized by program kickoff meeting.

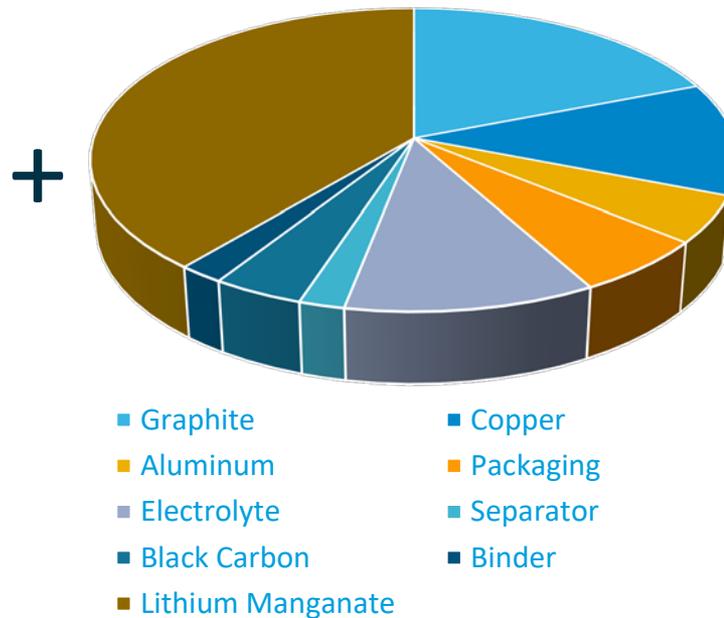
Phase 1: Proof of Concept Evaluations

Deliverable #1: Proof of Concept Power Solution



Photo Courtesy of the US Army C5ISR Center, Aberdeen, MD

Deliverable #2: BatPAC* model



1. Estimated performance of a packaged cell
2. Path to final product is clear

Mass distribution estimation published by Perrine Ribière, Sylvie Grugeon, Mathieu Morcrette, Simeon Boyanov, Stéphane Laruelle and Guy Marlair, Energy Environ. Sci., 2012, 5, 5271-5280.

*BatPAC is a model for battery design available from Argonne National Laboratory. Right side battery photo taken by Dawson Cagle.

Track 1: Program Metrics (BAA Table 1)

| Performance Parameter | Phase 1: Proof-of-Concept Power Solution | Phase 2: Packaged Power Solution | Phase 3: Prototype Power Solution |
|---|--|---|---|
| Track 1 | | | |
| Specific Energy and Energy Density when discharged at the C/3 Rate, Tested at 25°C | 600 Wh/kg 1080 Wh/L | 650 Wh/kg 1170 Wh/L | 750 Wh/kg 1350 Wh/L |
| Specific Power and Power Density when discharged at the C/3 Rate, Tested at 25°C | 200 W/kg 360 W/L | 220 W/kg 390 W/L | 250 W/kg 450 W/L |
| Specific Power and Power Density at 99% and 20% capacity when discharged at the 5/3C Rate, Tested at 25°C | 1000 W/kg, 10 sec. 1800 W/L, 10 sec. | 1080 W/kg for 1 min 1950 W/L for 1 min | 1250 W/kg for 1 min 2250 W/L for 1 min |

^[1] Target performance parameters for Phase 1 will be calculated from measured parameters. See the explanation provided in Section III.B Testing and Evaluation.

Track 1: Program Metrics (BAA Table 1 continued)

| Performance Parameter | Phase 1: Proof-of-Concept Power Solution | Phase 2: Packaged Power Solution | Phase 3: Prototype Power Solution |
|---|--|----------------------------------|-----------------------------------|
| Track 1 | | | |
| Specific Energy and Energy Density when discharged at the C/3 Rate, Tested at 0°C | 420 Wh/kg 755 Wh/L | 455 Wh/kg 820 Wh/L | 525 Wh/kg 945 Wh/L |
| Specific Power and Power Density when discharged at the C/3 Rate, Tested at 0°C | 140 W/kg 250 W/L | 150 W/kg 270 W/L | 175 W/kg 315 W/L |
| Maximum Mass and Volume | N/A | 5kg and 2.5L, respectively | |
| Maximum Unit Temp during operation | 120°C | | |
| Cost | <\$20,000/kWh Stored | | |



Track 1 Tests

1.1: Specific Energy / Energy Density at 25°C

- Reach 25°C equilibrium
- Discharge based on estimated capacity at C/3 Rate
- Stop discharge at cutoff voltage or diminished amperage for 5 seconds

1.2: Specific Energy / Energy Density at 0°C

- Reach 0°C equilibrium
- Discharge based on estimated capacity at C/3 Rate
- Stop discharge at cutoff voltage or diminished amperage for 5 seconds

1.3: Pulsed Power

- Reach 25°C equilibrium
- Discharge based on estimated capacity at C/3 Rate
- At 99% and 20% capacity, discharge at 5/3C Rate for 1 min.*
- Stop discharge at cutoff voltage or diminished amperage for 5 seconds

*In Phase I, the pulsed power discharge rate is only for 10 seconds.

Track 2 Program Metrics (BAA Table 2)

| Performance Parameter | Phase 1: Proof of Concept Power Solution ¹ | Phase 2: Packaged Power Solution | Phase 3: Prototype Power Solution |
|--|---|----------------------------------|-----------------------------------|
| Track 2 | | | |
| Capacity loss following storage Tested at 25°C (simulated) | <4% / month | <1% / month | <0.5% / month |
| Required number of discharge/recharge cycles | 3 Conditioning cycles, followed by 10 Tested Cycles | | |
| Specific Energy and Energy Density when discharged at the C/4 Rate, Tested at 25°C | 400 Wh/kg 720 Wh/L | 450 Wh/kg 810 Wh/L | 500 Wh/kg 900 Wh/L |
| Specific Power and Power Density, when discharged at the C/4 Rate, Tested at 25°C | 100 W/kg 180 W/L | 115 W/kg 200 W/L | 125 W/kg 225 W/L |
| Specific Power and Power Density, when discharged at the 1C Rate, Tested for 5 Seconds at 25°C | 400 W/kg 720 W/L | 450 W/kg 810 W/L | 500 W/kg 900 W/L |

* All listed metrics in this table will be measured during the first discharge cycle out of the 10 tested cycles.



Track 2 Program Metrics (BAA Table 2 continued)

| Performance Parameter Track 2 | Phase 1: Proof of Concept Power Solution ¹ | Phase 2: Packaged Power Solution | Phase 3: Prototype Power Solution |
|---|---|----------------------------------|-----------------------------------|
| Specific Energy and Energy Density when discharged at the C/4 Rate, Tested at 0°C | 280 Wh/kg 500 Wh/L | 315 Wh/kg 570 Wh/L | 350 Wh/kg 630 Wh/L |
| Specific Power and Power Density, when discharged at C/4 Rate, Tested at 0°C | 70 W/kg 125 W/L | 80 W/kg 140 W/L | 90 W/kg 160 W/L |
| Maximum Mass and Volume | N/A | 50g and 30mL, respectively | |
| Maximum Temp during operation | 120°C | | |
| Cost | <\$80,000/kWh Stored | | |



Track 2 Pre-Conditioning

- Upon receipt, all test articles will receive the same pre-conditioning treatment:
 - Weigh, determine volume and bring to 25°C equilibrium
 - Follow performer-supplied protocol for charging/fueling
 - Cycle 3x at a C/4 Rate, based on Performer-estimated capacity for each test article
 - Test articles considered depleted when discharge current cannot be reached for 5 seconds, or cut off voltage is not maintained for 5 seconds
- After pre-conditioning, test articles will be divided into 4 cohorts of 5 test articles each



Track 2 Tests

2.1: Specific Energy & Energy Density at 25°C

- Reach 25°C equilibrium
- Discharge based on estimated capacity at C/4 Rate
- Stop discharge at cutoff voltage or diminished amperage for 5 seconds
- Cycle 10 times

2.2: Specific Energy & Energy Density at 25°C after high temperature storage

- Reach 25°C equilibrium
- Discharge based on estimated capacity at C/4 Rate
- Stop discharge at cutoff voltage or diminished amperage for 5 seconds
- Cycle 10 times

2.3: Pulsed Power after high temperature storage

- Reach 25°C equilibrium
- Discharge based on estimated capacity at C/4 Rate
- With every 10% drop in capacity, discharge at 1C Rate for 5 sec.*
- Stop discharge at cutoff voltage or diminished amperage for 5 seconds
- Cycle 10 times

2.4: Specific Energy & Energy Density at 0°C after high temperature storage

- Reach 0°C equilibrium
- Discharge based on estimated capacity at C/4 Rate
- Stop discharge at cutoff voltage or diminished amperage for 5 seconds
- Cycle 10 times



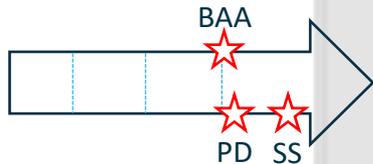
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Program Schedule

Pre-Program



- Kickoff Meetings (each Phase) ★
- Program-Wide Review Meetings ★
- Technical Review Meetings ★
- Site Visits ★
- Power Solutions Delivered ●
- Power Solution Models Delivered ●
- Independent T&E ■

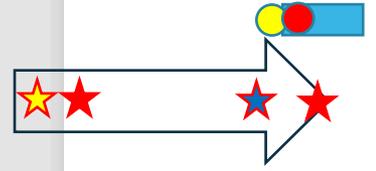
Phase 1: 15 months



Phase 2: 18 months



Phase 3: 12 months



| | | | | | |
|------|------|------|------|------|------|
| FY20 | FY21 | FY22 | FY23 | FY24 | FY25 |
|------|------|------|------|------|------|



Meetings and Travel

- Kickoff Meetings (Beginning of each Phase)
 - Usually held in the Washington, DC area
 - 2-3 participants from each research entity on each team
- Program Wide Review Meetings
 - Usually held in a central location
 - 2-3 participants from each research entity on each team
- Site Visits
 - Held at performer's site with all participating researchers

Attendees include performers, IARPA, T&E Team, and invited government stakeholders

**Please propose travel costs without consideration of COVID-19. Actual travel requirements will be based on health and safety conditions at the time.*



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In-Scope Technical Approaches

- Chemistry and Materials Science
 - 3D Structured materials, self assembled materials, nanomaterials, nanoporous materials, gels, polymers, solid state electrolytes, coatings, foams, catalysts, adhesives, grain boundary engineering, proton exchange membranes
- Surface and Interface Science
 - Reduction of passivation layers, catalyst poisoning, or dendrite structure formation
- Component Engineering and Manufacturing
 - Maximization of interfacial surface area, new fabrication and assembly techniques



Out-of-Scope Technical Approaches

- Partial solutions that cannot be independently tested and evaluated against program metrics.
- Solutions that employ radioactive materials.
- Research that does not have strong theoretical and experimental foundations or plausible scientific support for the Offeror's claims.
- Approaches that propose, or are likely to result in, only incremental improvements over the current state-of-the-art.
- Approaches that cannot be packaged for safety.
- Approaches that are incompatible with remote, unattended operation.
- Approaches with significant limitations on operating conditions or operational parameters.
- Development of component technology that is not required for the Offeror's approach.
- Solutions that contain arsenic.
- Solutions consisting of internal combustion engines.
- Solutions that cannot be made sufficiently robust for field use.



Proposing to Research Tracks

- Proposers may propose to Track 1, Track 2 or both.
- Both Tracks are equally important to IARPA.
- Multiple awards are anticipated for each Track.
- Proposers may address both Tracks in a single proposal.
- All proposals must address all three phases.



Point of Contact

Dr. Dawson Cagle

Program Manager

Office of the Director of National Intelligence

Intelligence Advanced Research Projects Activity (IARPA)

Washington, DC 20511

Phone: (301) 243-2083

- Electronic mail: dni-iarpa-BAA-20-02@iarpa.gov

include IARPA-BAA-20-02 in the Subject Line

- Website: <https://www.iarpa.gov/index.php/research-programs/resilience>

Please submit your questions.



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Doing Business with IARPA

Mr. Jack Hahne, IARPA Contracts Officer



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Doing Business with IARPA



- Eligibility Information
- Preparing the Proposal - Broad Agency Announcement (BAA) Section 4
 - Electronic Proposal Delivery (<https://iarpa-ideas.gov>)
- Organizational Conflicts of Interest
- Intellectual Property
- Streamlining the Award Process
- Questions and Answers (<http://www.iarpa.gov/index.php/faqs>)
- Pre-Publication Review
- IARPA Funds High Risk - High Payoff Research for the IC
- **RECOMMENDATION: Please read the entire BAA**



Eligible Applicants

- IARPA is seeking the best possible solutions
 - Content, communications, networking, and team formation are the responsibility of Proposers
- Foreign organizations and/or individuals may only participate as part of a U.S. based team
 - Prime Contractor must be a U.S. entity
 - All foreign participation must comply with any necessary Non-Disclosure Agreements, Security Regulations, Export Control Laws and other governing statutes
 - Any other requirements identified in the BAA



Ineligible Organizations

- The following are **not** eligible to submit proposals under this BAA or participate as team members under proposals submitted by eligible entities
 - ❑ Other Government Agencies,
 - ❑ Federally Funded Research and Development Centers (FFRDCs),
 - ❑ University Affiliated Research Centers (UARCs),
 - ❑ Any organizations that have a special relationship with the Government; .e.g. that would give them
 - ❖ access to privileged and/or proprietary information,
 - ❖ access to Government equipment or real property.



Preparing the Proposal

- Note restrictions in BAA Section 4 on proposal submissions
 - Interested Offerors must register electronically IAW instructions on: <https://iarpa-ideas.gov>
 - Interested Offerors are strongly encouraged to register in IDEAS at least one week prior to proposal “Due Date”
 - Offerors may only submit the “Final Version” of their proposal in IDEAS
 - Classified proposals are not anticipated for this program.
- BAA format is established to answer most questions
- Check Beta.Sam.gov for amendments & Q&As
- BAA Section 5 – Read Evaluation Criteria carefully
 - e.g., “The technical approach is credible and includes a clear assessment of primary risks and a means to address them”



Preparing the Proposal (BAA Sect 4)

- Read and comply with the instructions on Organizational Conflict of Interest (OCI)
- Note eligibility restrictions on use of FFRDCs, UARCs and other similar organizations that have a special relationship with the Government
 - Focus on possible OCIs of your institution as well as the personnel and subcontractors on your team
 - See Section 4: It specifies the non-Government (e.g., SETA, FFRDC, UARC, etc.) support we will be using. If you have a potential or *perceived* conflict, bring it to IARPA's attention as soon as possible



Organizational Conflict of Interest (OCI)

- If a prospective offeror, or any of its proposed subcontractor teammates, believes that a potential conflict of interest exists or may exist (whether organizational or otherwise), the offeror should promptly raise the issue with IARPA at dni-iarpa-baa-20-02@iarpa.gov.
- A potential conflict of interest includes but is not limited to any instance where an offeror, or any of its proposed subcontractor teammates, is providing either scientific, engineering and technical assistance (SETA) or technical consultation to IARPA. In all cases, the offeror shall identify the contract under which the SETA or consultant support is being provided.
- Without a waiver, neither an offeror, nor its proposed subcontractor teammates, can simultaneously provide SETA support or technical consultation to IARPA and compete or perform as a Performer under this solicitation.



Intellectual Property (IP)

- Typically IARPA funds 100% of the contracted work
- Any deliverables funded 100% by the government will be delivered with **UNLIMITED** rights.
- **Government Purpose Rights (GPR)** are a Department of Defense requirement and IARPA applies FAR based contracting procedures.
 - State in the proposal any restrictions on deliverables relating to existing materials (data, software, tools, etc.)



Streamlining the Award Process



- Cost Proposal – we only need what we ask for in the BAA
- Statements of Work (format) may need to be revised
- Key Personnel
 - Expected percentage of effort/hours that will be worked, note the Evaluation Criteria requiring relevant experience and expertise
- If selected for negotiations, the Contracting Officer may request your review of subcontractor proposals

Questions and Answers

- Q&A's today at Proposers' Day are informal information and do not override the BAA. ***The BAA is the authoritative document.***
- Please read entire BAA before submitting questions and conduct a Ctrl+F word search.
- Pay attention to Section 4 Proposal & Submission Information.
- Read Frequently Asked Questions on the IARPA website @ <http://www.iarpa.gov/index.php/faqs>
- Send your questions as soon as possible
 - ❑ RESILIENCE BAA: dni-iarpa-baa-20-02@iarpa.gov
 - ❑ Write questions as clearly as possible
 - ❑ Do NOT include proprietary information



Pre-Publication Review



- We encourage publication of **UNCLASSIFIED** IARPA-funded research in peer-reviewed journals, presentation at conferences and publication in conference proceedings.
- Prior to public release of any work submitted for publication, the Performer will:
 - ❑ Communicate results to be publicly released with the IARPA Program Manager to discuss any sensitivities (e.g., security, speculation on IC use cases, etc.)
 - ❑ Provide advance courtesy copies to the IARPA PM and Contracting Officer Representative (COR/COTR)

IARPA Funding

- IARPA funds **High Risk – High Payoff Research** for the Intelligence Community (IC)
 - IARPA cannot waive the requirements of:
 - ❖ Export Administrative Regulation (EAR) or
 - ❖ International Traffic in Arms Regulation (ITAR)
 - Not subject to DoD funding restrictions for R&D related to overhead rates

- IARPA is not DoD



Disclaimer



- This is Research for the Intelligence Community
- Content of the Final BAA will be specific to this program
 - The Final BAA is being developed
 - Following issuance, look for Amendments and Q&As
 - There will likely be changes
- The information conveyed in this brief and discussion is for planning purposes and is subject to change prior to the release of the **Final BAA**.



THANK YOU!





Answers to Questions Begins at 3:00 pm EDT





Answers to Questions

